

# Discussion : Tsar Bomba

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This article was proposed for renaming on August 13, 2010.

Following discussion, it was decided to leave the name **Tsar Bomba** unchanged.

To resubmit an article for renaming, there must be compelling reasons , otherwise it may be regarded as playing with the rules .



This article was a candidate for a good article in Russian Wikipedia. See the nomination page (status not assigned on September 8, 2016).

## Content

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Photo

Miscellaneous

"Swift Jack" or "Spreading Cranberry"?

Is this really true?

But this is not entirely true.

Is it true?

Mass defect.

Claims without sources

glass

article based on documents.

—Grumbler ( talk ) 22:59, 17 September 2020 (UTC)

- Regarding Finder-nev edits with literal quotation of Veselovsky's article, they are VP:COPYVIO , violate the Civil Code of the Russian Federation (text published on the PROAtom website is prohibited for copying), which is unacceptable in Wikipedia. Pay attention to my comments to the edits, I wrote them for a reason. At the same time, pay attention to the result of your last two edits (<https://ru.wikipedia.org/w/index.php?diff=109293350&oldid=109248183>) : "Error in footnotes?: Invalid <ref> tag; no text specified for footnotes :0" in bold red at the bottom of the page.Grumbler ( talk ) 23:16, 17 September 2020 (UTC)

An edit to an article from 12/09/2020 by a certain **Shari Garland** , where she deleted my edit to the article concerning the design of the Tsar Bomba, where I wrote that **2 thermonuclear charges were used as the first stage of the bomb, not one nuclear one** , another attempt to edit the article by people who are completely incompetent in this topic. Before editing, read the discussion of the article. At least 2 authoritative sources of information write (links to which were already given at the end of the article) that 2 thermonuclear charges were used as the first stage of the bomb, not one nuclear one. I will give them below:

- 1). RECORD SOVIET EXPLOSION (<https://archive.is/floUD>) A.K. Chernyshev, Deputy Scientific Director of RFNC-VNIIEF for testing technologies.

Quote: " **Among the features of this charge, it should be noted that the large volume of the charge (due to its high energy release) required significant amounts of X-ray energy to achieve implosion. The nuclear charges developed did not satisfy this condition, and therefore a previously developed two-stage thermonuclear charge with a relatively small energy release was used as the primary source of the "super-powerful charge". This charge was previously developed by Yu. A. Trutnev and Yu. N. Babaev.** "

- 2). I.A. Andryushin, A.K. Chernyshev, Yu.A. Yudin. TAMING THE NUCLEAR. PAGES OF THE HISTORY OF NUCLEAR WEAPONS and NUCLEAR INFRASTRUCTURE OF THE USSR. Sarov, 2003. ([https://www.atomic-energy.ru/files/books/Ukroschenie%20oyadra%20\(2005\).pdf](https://www.atomic-energy.ru/files/books/Ukroschenie%20oyadra%20(2005).pdf)) The same information is on page 113.

Quote: " Among the features of this charge, it should be noted that the large volume of the charge (due to its high energy release) required significant amounts of X-ray energy to achieve implosion. The nuclear charges developed did not satisfy this condition, and therefore a previously developed two-stage thermonuclear charge with a relatively small energy release was used as the primary source of the "super-powerful charge". This charge was previously developed by Yu. A. Trutnev and Yu. N. Babaev. "

3). A.V. Veselovsky, honorary veteran of RFNC-VNIIEF, head of the scientific testing department (in 1956-2009), Laureate of the USSR State Prize TSAR BOMB IS 50 YEARS OLD (<http://www.proatom.ru/modules.php?name=News&file=article&sid=3364>) ( <https://web.archive.org/web/2011112092615/www.proatom.ru/modules.php?name=News&file=article&sid=3364> )

Quote: " A large number of serious innovations were used in the design of the superbomb itself and its charge. The powerful thermonuclear charge was made according to the "bifilar" scheme: for the radiation implosion of the main thermonuclear block, two thermonuclear charges were placed on both sides (front and back) to ensure synchronous (with a time difference of no more than 0.1  $\mu$ s) ignition of the thermonuclear "fuel". KB-25 (VNIIA) modified the serial automatic detonation unit for this charge. "

4). *Veselovsky A.V. Nuclear shield. Notes of a tester* . – see p. 55 [http://elib.biblioatom.ru/text/veselovskiy\\_yaderny-schit\\_2003/go,52/](http://elib.biblioatom.ru/text/veselovskiy_yaderny-schit_2003/go,52/)

Quote: " To "warm up" a powerful thermonuclear charge, a new principle of "double" (two-sided) atomic compression was used, which required synchronicity of the detonation of two atomic initiators, which was ensured by careful regulation, down to hundredths of a microsecond, of the initiation processes. The new system justified itself, although it was not without its negative aspects. "

—Finder-nev ( talk ) 15:12, 12 January 2021 (UTC)

I have edited the English and Russian versions of this article, mostly translating half of the article into English. It was not my intention to remove

anything. You can add it back.Shari Garland ( talk ) 23:28, 13 January 2021 (UTC)

## **About 100 megaton torpedo in 1952.**

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The story about the T-15 thermonuclear torpedo with a capacity of 100 megatons in 1952 is a fiction-compilation of an incompetent journalist from the online publication TASS from October 29, 2016, who wrote that article. The information presented in the article: [http://bourabai.ru/adushkin/ch1\\_6.htm](http://bourabai.ru/adushkin/ch1_6.htm) contains only information that the T-15 torpedo was planned to be 1550 mm in caliber, which at that time roughly corresponded to the initial caliber of the RDS-1 atomic bomb charge, and later to the caliber of the RDS-6s "layer cake", which was considered thermonuclear and had a maximum explosive power of about 400 kilotons. The idea of a 100 megaton torpedo was first expressed only in 1962, by A.D. Sakharov after the tests of the AN-602, which he writes about in his book of memoirs. Removed false information that had nothing to do with the Tsar Bomba article. The Russian Wikipedia has its own separate article about the T-15 torpedo.

P.S.: At that time, the RDS-6S had not even been created yet, with a maximum possible calculated yield of no more than 1 megaton, and they did not know how to create a more powerful RDS-6S. Therefore, the T-15 with a yield of 100 megatons is a "hat-throwing" invention of a journalist, not supported by anything. —Finder-nev ( talk ) 01:29, 29 January 2021 (UTC)

## **The RDS-202 used 2 nuclear charges (the so-called "bifilar" scheme)**

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**The RDS-202 used two nuclear charges (the so-called "bifilar" scheme), which was later used in the creation of the RN-602 (the "Tsar" bomb).** Probably, the RDS-202 was a two-stage, unlike the three-stage AN-602.

[http://elib.biblioatom.ru/text/dela-i-gody\\_2010/go,18/](http://elib.biblioatom.ru/text/dela-i-gody_2010/go,18/) - Deeds and years: Dedicated to the 50th anniversary of KB-2 RFITs-VNIITF... ("Deeds and years", p.18)

*In November 1955, the USSR successfully tested a nuclear charge based on the use of a new compression principle, allowing the creation of high- and super-high-power charges with a high utilization factor of nuclear materials. The calculation and theoretical work on the justification of the physical design of the charge for the new SpAB, **which envisaged the use, in contrast to the tested prototype, of two primary initiators instead of one and a much heavier main energy-producing module** , was completed in June 1956.*

<http://book.sarov.ru/wp-content/uploads/2018/07/Atom-73-2017-2.pdf> - N. P. Voloshin. ' **The Ural nuclear center is named after him** . ' Atom, No. 1, 73-2017, p. 5

*A group of theorists headed by E. I. Zababakhin and Yu. A. Romanov (E. N. Avrorin, Yu. S. Vakhrameev, M. N. Nechaev, V. B. Rozanov, L. P. Feoktistov, M. D. Churazov, M. P. Shumaev) **chose successful ways to improve the physical scheme of the charge, compared to the prototype - RDS-37, aimed at ensuring the operation of a much heavier secondary module. In particular, for the first time two primary modules were used to service the main one** .* - [Finder-nev](#) ( [talk](#) ) [01:34](#), 4 February 2021 (UTC)

## "Written by an illiterate samizdat science fiction writer"

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@ [Finder-nev](#) : NFS, [Kazantsev was called \(https://ru.wikipedia.org/w/index.php?title=%D0%A6%D0%B0%D1%80%D1%8C-%D0%B1%D0%BE%D0%BC%D0%B1%D0%B0&curid=169135&diff=116377203&oldid=116352096\)](https://ru.wikipedia.org/w/index.php?title=%D0%A6%D0%B0%D1%80%D1%8C-%D0%B1%D0%BE%D0%BC%D0%B1%D0%B0&curid=169135&diff=116377203&oldid=116352096) a samizdat science fiction writer. — [KVK2005](#) ( [talk](#) ) [07:51](#), 31 August 2021 (UTC)

Regarding the samizdat, maybe I'm wrong, maybe something was published somewhere. I googled it, and it turned out that the science fiction writer Kazantsev was quite prolific. But you must agree that "the explosion of the oceans on the planet from the explosion of a super-powerful thermonuclear bomb" is complete anti-scientific nonsense, the impossibility of which was calculated and proven by scientists even before the first test of the first detonated atomic bomb in the Trinity test, long before the release of Kazantsev's unfounded fantasies.